



**Forensic Analytical**  
2959 Pacific Commerce Drive  
Rancho Dominguez, California 90221

**PHASE IA ASBESTOS SURVEY  
HARBOR GATEWAY CENTER  
TORRANCE, CALIFORNIA**

**FEBRUARY 1997**



## Forensic Analytical

March 11, 1997

Mr. Mario Stavale  
McDonnell Douglas Realty Company  
4060 Lakewood Boulevard, 6th Floor  
Long Beach, CA 90808-1700

Re: Phase IA Asbestos Survey - 18 Buildings: Harbor Gateway Center, Torrance

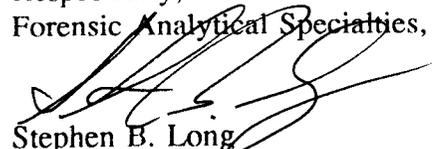
Dear Mr. Stavale,

As requested, between January 31 and February 6, 1997, Mr. Robert McWhorter (CSST #93-1232) and Mr. Stephen Long (CAC #92-0580) of Forensic Analytical conducted a pre-demolition asbestos survey of eighteen buildings on the Phase IA portion of the referenced site. Structures surveyed were located in two groups on opposite sides of the Douglas Aircraft Corporation plant. The structures surveyed included the following: Bldg. 4, Bldg. 11, Bldg. 13, Bldg. 14, Bldg. 15, Bldg. 18, Bldg. 60, two Radome buildings SE of Bldg. 60, Bldg. 60A, Bldg. 60B, Bldg. 1(CRS Area), Bldg. 21, Bldg. 40, Bldg. 41, Bldg. 45, Tanks west of Bldg. 45, Bldg. 66-1, and the metal shed west of Bldg. 66-1. Eleven of the buildings had been partially surveyed by Hall-Kimbrell Environmental Services, Inc. in 1989 (Report No. 0390513, dated 2/9/90). Copies of the Spreadsheets portion of the report Hall-Kimbrell report are attached as Appendix A.

For the current survey, samples were collected from those materials not previously tested by Hall-Kimbrell. The samples collected were analyzed by Polarized Light Microscopy (PLM) at Forensic's Rancho Dominguez, California laboratory for possible asbestos content. Materials found to contain asbestos are listed in the attached table. Also noted on the attached list is the possible presence of underground materials on the site, such as asbestos-cement water pipe, electrical ducts, insulated pipe, or waterproofing coatings. Where PLM results indicated Trace amounts of asbestos, the material was analyzed by the point count method of PLM, which is required by the South Coast Air Quality Management District (SCAQMD) to confirm asbestos concentrations below one percent. Where point count analysis showed less than one percent, the affected material was analyzed using gravimetry reduction and Transmission Electron Microscopy (TEM) to determine if the material contains greater than 0.1% asbestos (Cal/OSHA definition of asbestos-containing construction materials). Forensic did not disassemble plant equipment, such as pumps and boilers. Any materials not previously sampled found inside equipment should be assumed to contain asbestos unless sampling and analysis proves otherwise.

Hard copy analytical reports, grouped by building, are attached for your record as Appendix B. Each report consists of a summary listing, followed by an individual Bulk Material Analysis sheet for each sample. Where multiple analytical reports were produced for a building, the reports are separated by a blank divider page. If you have any questions, please call me at (310) 763-2374.

Respectfully,  
Forensic Analytical Specialties, Inc.

  
Stephen B. Long  
Project Manager  
Certified Asbestos Consultant, Cert. No.: 92-0580

SUMMARY OF ASBESTOS-CONTAINING MATERIALS  
PHASE IA ASBESTOS SURVEY - FEBRUARY 1997  
HARBOR GATEWAY CENTER - TORRANCE, CALIFORNIA  
Page 1 of 4

**PHASE IA BUILDINGS ON WEST SIDE OF  
DOUGLAS AIRCRAFT CORPORATION PLANT**

Bldg. 4

Roof sealant tar - penetrations, perimeter, parapet wall seams and parapet wall metal cap seams

Bldg. 11

Non-slip floor coating

Plaster wall material - wall adjacent to elevator shaft and interior walls of elevator shaft  
(plaster contains less than 0.1% asbestos by weight, as determined by TEM analysis)

Pipe and pipe fitting insulation - associated with air handling unit

Weatherproof coating on corrugated steel panels

Roof sealant tar - antennae penetrations and patch at ladder

Bldg. 13

No asbestos-containing materials identified

Bldg. 14

Floor tile and associated mastic - Display areas, restroom entries, offices

Pipe and pipe fitting insulation - interior and exterior of building

Vent sealant - Second floor storage area ceiling vent opening

Glass block window perimeter sealant

Roofing tar paper/felt

Roof sealant tar - penetrations and patches

Roof vent coating - SW roof vent

Bldg. 15

Floor mastic - throughout

Glass block window perimeter sealant

Roof sealant tar - penetrations, patches and parapet wall corners

SUMMARY OF ASBESTOS-CONTAINING MATERIALS  
PHASE IA ASBESTOS SURVEY - FEBRUARY 1997  
HARBOR GATEWAY CENTER - TORRANCE, CALIFORNIA

Page 2 of 4

**PHASE IA BUILDINGS ON WEST SIDE OF  
DOUGLAS AIRCRAFT CORPORATION PLANT (continued)**

Bldg. 18

Stair covering mastic  
Roof sealant tar - penetrations, patches and electrical conduit

Bldg. 60

Drywall with joint compound (sampled as a composite)  
(drywall with joint compound is less than one percent asbestos by polarized light  
microscopy point count analysis, but contains greater than 0.1% asbestos by weight)  
9" floor tile and mastic  
12" vinyl floor tile (no asbestos detected in mastic)  
Non-slip coating on stairway treads  
Roof sealant tar - Roof penetrations, perimeter, and seams

W Radome Building SE of Bldg. 60

Non-slip coating on stairway treads  
Roof sealant tar - penetrations, perimeter and seams

E Radome Building SE of Bldg. 60

Asbestos-cement board exterior wall material

Bldg. 60A

Non-slip coating on stairway treads  
Roof sealant tar - Roof perimeter and seams

Bldg. 60B

Non-slip coating on stairway treads  
Roof sealant tar - Roof perimeter and seams

SUMMARY OF ASBESTOS-CONTAINING MATERIALS  
PHASE IA ASBESTOS SURVEY - FEBRUARY 1997  
HARBOR GATEWAY CENTER - TORRANCE, CALIFORNIA  
Page 3 of 4

**PHASE IA BUILDINGS ON EAST SIDE OF  
DOUGLAS AIRCRAFT CORPORATION PLANT**

Bldg. 1 (NE addition) - CRS Area (East side chemical mill)

Black asphaltic pipe wrap - E side of tanks, near center  
Woven electrical wire insulation associated with orange pipe wrap - N side

Bldg. 21

No suspect materials

Bldg. 40

Duct vibration damper cloth - duct at E window  
Window glazing putty  
Penetration sealant associated with walk-in freezers  
Black asphaltic pipe wrap associated with walk-in freezers  
Wall and ceiling panel caulk associated with NW walk-in freezer  
(caulk contains less than 0.1% asbestos by weight, as determined by TEM analysis)  
Weatherproof coating on steel rooftop exhaust vents  
Roof sealant tar - penetrations, seams, patches and perimeter

Bldg. 41

Boiler/tank insulation  
Boiler gaskets  
Pipe and pipe fitting insulation - interior and exterior of building  
Window glazing putty  
Weatherproof coating on corrugated steel panels - walls and roof  
Roof sealant tar - penetrations (inaccessible - assumed to be asbestos-containing)  
Tan and white coating over tar and concrete base of exterior main smokestack

Bldg. 45

Roof sealant tar - penetrations

Tanks west of Bldg. 45

No suspect materials identified

SUMMARY OF ASBESTOS-CONTAINING MATERIALS  
PHASE IA ASBESTOS SURVEY - FEBRUARY 1997  
HARBOR GATEWAY CENTER - TORRANCE, CALIFORNIA  
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**PHASE IA BUILDINGS ON EAST SIDE OF  
DOUGLAS AIRCRAFT CORPORATION PLANT (continued)**

Bldg. 66-1

Vinyl floor tile and mastic  
Roofing tar paper/felt  
Roof sealant tar - penetrations, seams, patches and perimeter

Metal Shed west of Bldg. 66-1

Roof sealant tar - penetrations, seams and screw holes  
Black asphaltic pipe wrap - exterior pipe

Throughout Phase IA site

Possible presence of underground materials, such as asbestos-cement water pipes and electrical ducts, insulation on pipes or waterproofing coatings

## **APPENDIX A**

### **SPREADSHEETS FROM HALL-KIMBRELL ASBESTOS SURVEY REPORT**

## REPORT FORMAT FOR SPREADSHEETS

The field data and the laboratory results are analyzed by the Hall-Kimbrell management program. The results of this analysis are presented in spreadsheet format. The spreadsheets are organized by the building numbers assigned by Hall-Kimbrell. The survey information for the building is presented by area with descriptions of materials contained within that area.

Since the spreadsheet format is oriented to data only, a short explanation of each element contained therein is given below. The following explains the content of each column and its relationship with the other items on the page.

1. **Area Number** - This is a number which appears as a heading and is assigned by the data management group for reference purposes only. The description of the area follows the area number and relates the room, floor, or section of a room where materials were found.
2. **Location of Material** - The Location of Material describes where in the area or room the material was observed.
3. **Bulk Sample Description** - This column is a written identification of the material that was taken from the area, such as pipe covering, spray-applied acoustical plaster, boiler packing, etc. This, again, is used for identification purposes.
4. **Pipe ID** - This column identifies the type of pipe system on which the mudded joint packing or pipe insulation was found. A description of each code is listed below:

BFW	Boiler Feed Water
CON	Condensate
CWS/R	Chilled Water Supply/Return
DR	Drain
DT	Dual Temperature
DW	Domestic Water
EXH	Exhaust
FIRE	Fire Hose & Stand Pipe Lines
FO	Fuel Oil
HPS/R	High Pressure Steam Supply/Return
HWS/R	Hot Water Supply/Return
LPS/R	Low Pressure Steam Supply/Return
MUW	Make-Up Water
PW	Potable Water
RS/R	Refrigerant Supply/Return
TW	Treated Water

5. **Sample Group Number** - This is a number assigned by the field inspector during the survey. A unique sample group number is assigned for each material depending on the type of material, system, and sampling protocol. A 999 designation indicates a sample was not taken but the material is suspected of containing asbestos.
6. **Number of Samples** - This column explains the number of samples that were collected in the sample group from a single material. For a listing of the sample numbers in the group, refer to the petrographic analysis section of the report.

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7. Percent Asbestos - This number is the average percent asbestos from the petrographic analysis of all samples contained within this multi-sample group. A description of the types and percentages of each type of asbestos found in each sample can be found in the petrographic analysis for that sample. If a zero is present in this column none of the samples contained asbestos. The exposure potential will be zero and no cost estimates are listed.
8. Quantity - This is the actual quantity of the material to be used for estimating costs. Quantities have been determined by on-site measurement or plan take-offs. Where access is restricted, best estimates are determined from whatever information is available. An accuracy factor of +/- 10% can be assumed. The units of measurement such as linear feet, square feet, or other applicable dimensions are indicated after the quantity. The size of pipe indicated reflects the nominal outside diameter of the pipe with insulation. A four inch diameter pipe would be expressed as "4 in. O.D." Pipe lagging is expressed in units of linear feet, but mudded joint packings are expressed in numbers of individual units of the indicated size. The mudded joint packing designation includes any mudded material, such as hanger connections, elbow joints and valves. All fireproofing material is expressed in square feet of total beam and deck area, rather than square foot area of floor, and the figure has an accuracy factor of +/- 8%. All acoustical plasters and decorative plasters are, again, expressed in total surface area, which usually corresponds to floor area, and this figure has an accuracy factor of +/- 5%. Any miscellaneous material such as wall plaster, asbestos-containing debris, etc. is expressed as an approximate quantity with a +/- 30% accuracy factor.
9. O & M Code - This column contains the Operations and Maintenance code for this particular material.
10. Exposure Potential - The exposure potential is determined for each area. An exposure potential of 0 indicates the material does not contain asbestos. The exposure potential differs from actual ambient exposure. Ambient exposure refers to the amount of asbestos that is inhaled on a day-to-day basis in a contaminated building. The exposure potential, on the other hand, is the possibility, expressed numerically, of the occurrence of an accidental disturbance of the material. The disturbance could be in the form of impact with the material, vibration from mechanical systems, water damage, or other causes. The exposure potential is very important in determining priority for abatement as well as the necessity for immediate implementation of control measures.  
  
While ambient exposure is generally relatively low in public buildings, material disturbances can result in very massive doses of asbestos fibers being released into the work area and a building occupant's breathing zone for short periods of time. It has been estimated by many experts that peak exposures from accidental disturbance contribute the vast majority of asbestos fibers in a person's lungs, compared to those inhaled ambiently.
11. Priority Level - The exposure potentials for all buildings contained in this study have been divided into priorities, with Priority Level I posing the greatest exposure hazard. Subsequent priorities characterize areas with lower exposure potentials. Exposure potential numbers are distributed on a continuum, and the priority is based on the distribution. Priority Level I usually designates those materials which are creating the highest exposure potential to the building occupants, as expressed by the exposure potential number as well as our subjective interpretation of the notes taken during the inspection. Although Priority Level II should be considered serious, it does not yield the degree of danger that Priority Level I does, and so on. The Priority Levels are primarily used in conjunction with a phased abatement program, where the highest priority areas are removed first and lower priorities are managed under an Operations and Maintenance Plan until they can ultimately be removed. No priority level is generated if the sample does not contain asbestos.
12. Removal Cost - This is the portion of the cost associated with the removal of the asbestos-containing material. This cost includes area preparation prior to abatement and cleanup and disposal of waste after abatement. The removal cost does not include the costs incurred to gain access to some of the materials which may be enclosed behind ceilings or other obstacles.

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13. **Replacement Costs** - This is the cost associated with replacement of asbestos-containing materials or re-insulation of the specific item from which asbestos has been removed.
14. **Total Cost** - The total cost is the sum of the cost estimated for removal of the asbestos-containing materials and the cost of replacement of this material with nonasbestos products of equivalent or greater quality. Estimates are based on average unit values for the type of material and, in general, our experience in estimating the cost of asbestos abatement projects. The unit prices used in this estimate are based on projects in the client's respective geographical location. A subtotal appears for each exposure area. At the end of the column, the base abatement cost is totaled for that building. Engineering, air monitoring, and other related costs are not included in the base abatement cost which appears on the spreadsheets.

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ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance facility

Project Number: 0390513  
Building Number: 1

Building Name: Sheet Metal Fabrication  
Address : C-6 facility  
Torrance, California

Page: 14  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/16/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	MUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	OMA CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
Adjacent to chemical mill	16	1	fire blanket		0%	35 sq.ft.	OMZ	0		\$0	\$0	\$0
							AREA #	12	TOTALS	\$0	\$0	\$0
** Area 13 East Side Chemical Mill Area												
Adjacent to chemical mill	14	3	pipe covering		0%	14 ft. 4 in. O.D.	OMA	0		\$0	\$0	\$0
Adjacent to chemical mill	14	3	pipe covering		0%	65 ft. 6 in. O.D.	OMA	0		\$0	\$0	\$0
Adjacent to chemical mill	15	3	mjp on pipe covering		0%	4 4 in. joint	OMA	0		\$0	\$0	\$0
Adjacent to chemical mill	15	3	mjp on pipe covering		0%	28 6 in. joint	OMA	0		\$0	\$0	\$0
							AREA #	13	TOTALS	\$0	\$0	\$0
** Area 14 South Chemical Mill												
Adjacent to scrubbers	18	3	pipe covering	CAUS	0%	14 ft. 4 in. O.D.	OMA	0		\$0	\$0	\$0
Adjacent to scrubbers	18	3	pipe covering	CAUS	0%	65 ft. 6 in. O.D.	OMA	0		\$0	\$0	\$0
In tunnel servicing NaOH tanks	18	3	pipe covering	CAUS	0%	70 ft. 6 in. O.D.	OMA	0		\$0	\$0	\$0
Adjacent to NaOH tanks	18	3	pipe covering	CAUS	0%	80 ft. 6 in. O.D.	OMA	0		\$0	\$0	\$0
							AREA #	14	TOTALS	\$0	\$0	\$0

Material is presently in fair condition and friable. Fiber release may occur if material is damaged or disturbed.

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ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 4  
Building Name: Substation  
Address : C-6 Facility  
Torrance, California

Page: 1  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/30/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	X ASB	QUANTITY	OMZ CODE	EXP POT LEVEL	PRIORITY	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
** Area	1	3	roofing tar paper/roofing felt		0%	2700 sq.ft.	OMZ	0		\$0	\$0	\$0
Throughout							AREA #	1	TOTALS	\$0	\$0	\$0

BUILDING # 4	TOTALS	\$0	\$0	\$0
PROJECT TOTALS		\$0	\$0	\$0

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ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 11  
Building Name: Storage

Address : C-6 Facility  
Torrance, California

Page: 1  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/24/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	MUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	O&M CODE	EXP POT LEVEL	PRIORITY	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
** Area 1 First Floor, Floors												
South side of building	3	3	floor tile & mastic		0%	1000 sq.ft.	OMZ	0		\$0	\$0	\$0
							AREA #	1	TOTALS	\$0	\$0	\$0
** Area 2 First Floor, Air Handling Unit												
On piping associated with unit	4	3	pipe covering	HVS/R	57%	35 ft. 4 in. O.D.	OMA	57	II	\$347	\$217	\$564
On fittings associated with unit	5	3	mjp on pipe covering	HVS/R	1%	14 4 in. joint	OMA	38	III	\$437	\$243	\$680
Material is located in the southeast corner of the building. Areas of damage have left some debris on the platform and ground.												
							AREA #	2	TOTALS	\$784	\$460	\$1,244
** Area 3 Weatherproofing												
Throughout exterior and interior siding	1	3	weatherproof coating on steel		35%	20300 sq.ft.	OMZ	11	IV	\$40,397	\$80,591	\$120,988
							AREA #	3	TOTALS	\$40,397	\$80,591	\$120,988
Minor areas of contact damage near the ground and stairwells. Presently material is non-friable and in fair condition. This material may render friable if it is ripped, sanded, sawn or pulverized.												

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Project Number: 0390513  
 Building Number: 11  
 Building Name: Storage  
 Address : C-6 Facility  
 Torrance, California

ASBESTOS ASSESSMENT SURVEY  
 DAC C-6 Torrance Facility

Page: 2  
 Building Type:  
 Year Constructed: UNKN  
 Date Inspected: 10/24/89  
 Inspector: Falk, Rowles

LOCATION	SAMPLE GRP GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	X ASB	QUANTITY	Q&M CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
** Area	4	Roof										
Throughout	2	3	roofing tar paper/roofing felt		0%	4500 sq.ft.	OMZ	0		\$0	\$0	\$0
						AREA #	4	TOTALS		\$0	\$0	\$0

BUILDING # 11	TOTALS	\$41,181	\$81,051	\$122,232
PROJECT TOTALS		\$41,181	\$81,051	\$122,232

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Project Number: 0390513  
Building Number: 14  
Building Name: Employee Store  
Address : C-6 Facility  
Torrance, California

ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Page: 1  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/28/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	O&M CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS	
** Area 1 Floors													
Display area, restroom entries, offices	1	3	floor tile & mastic		11%	5190 sq.ft.	OMZ	13	IV	\$20,760	\$14,740	\$35,500	
Presently the material is non-friable and in fair condition. There are small isolated areas of damage in display area. This material may render friable if ripped, sanded, sawn or pulverized.													
** Area 2 Ceilings													
Display area	2	3	drop or lay-in panel		0%	3002 sq.ft.	OMG	0		\$0	\$0	\$0	
** Area 3 Ceilings													
Behind 1 x 1 acoustical tiles	6	1	Mastic		0%	132 sq.ft.		0		\$0	\$0	\$0	
** Area 4 Attic													
										AREA # 1 TOTALS	\$20,760	\$14,740	\$35,500
										AREA # 2 TOTALS	\$0	\$0	\$0
										AREA # 3 TOTALS	\$0	\$0	\$0

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ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 14  
Building Name: Employee Store  
Address : C-6 Facility  
Torrance, California

Page: 2  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/28/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	OMA CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
Along southeast end west walls	3	3	pipe covering	HPS/R	35%	64 ft. 4 in. O.D.	OMA	38	III	\$634	\$397	\$1,031
Along southeast end west walls	3	3	pipe covering	HPS/R	35%	66 ft. 6 in. O.D.	OMA	38	III	\$951	\$595	\$1,546
Along southeast end west walls	4	3	mjp on pipe covering	HPS/R	45%	1 4 in. joint	OMA	38	III	\$31	\$17	\$48
Along southeast end west walls	4	3	mjp on pipe covering	HPS/R	45%	5 6 in. joint	OMA	38	III	\$215	\$126	\$341

Material is in good condition. Some material is within reach in the attic storage area. Care should be taken not to disturb this material.

\*\* Area 5 Roof

AREA # 4 TOTALS \$1,831 \$1,135 \$2,966

Throughout	5	3	roofing tar paper/roofing felt	2%	5600 sq.ft.	OMZ	30	III	\$19,040	\$12,712	\$31,752
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Material is presently non-friable and in fair condition. The material may become friable if it is ripped, sanded, sawn or pulverized.

AREA # 5 TOTALS \$19,040 \$12,712 \$31,752

\*\* Area 6 West Exterior

Along wall near ground	3	3	pipe covering	HPSR	35%	260 ft. 4 in. O.D.	OMA	30	III	\$2,577	\$1,612	\$4,189
North end	3	3	pipe covering	HPSR	35%	15 ft. 4 in. O.D.	OMA	30	III	\$149	\$93	\$242
South end	3	3	pipe covering	HPSR	35%	5 ft. 4 in. O.D.	OMA	30	III	\$50	\$31	\$81

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ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 14  
Building Name: Employee Store  
Address : C-6 Facility  
Torrance, California

Page: 3  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/28/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE NUMB GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	X ASB	QUANTITY	O&M CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
							AREA #	6	TOTALS	\$2,776	\$1,736	\$4,512
							BUILDING #	14	TOTALS	\$44,407	\$30,323	\$74,730
							PROJECT TOTALS			\$44,407	\$30,323	\$74,730

PRIVILEGED LEGAL COMMUNICATION  
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Project Number: 0390513  
Building Number: 15  
Building Name: Storage  
Address : C-6 Facility  
Torrance, California

ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Page: 1  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/28/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	MUMS OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	OMM CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
** Area 1 Floors												
West side throughout (tile and mastic)	1	3	vinyl floor tile		5%	1818 sq.ft.	OMI	10	IV	\$5,454	\$5,163	\$10,617
Material is in fair condition with some areas of damage. It is presently non-friable but may become friable if sanded.												
** Area 2 Floors												
Throughout	3	3	Mastic		10%	3300 sq.ft.		10	IV	\$9,900	\$0	\$9,900
Material is presently in fair condition and non-friable. Material may render friable if ripped, sanded, seen or pulverized.												
** Area 3 Roof												
Throughout	2	3	roofing tar paper/roofing felt		0%	3300 sq.ft.	OMZ	0		\$0	\$0	\$0
TOTALS												
							AREA # 1	TOTALS		\$5,454	\$5,163	\$10,617
							AREA # 2	TOTALS		\$9,900	\$0	\$9,900
							AREA # 3	TOTALS		\$0	\$0	\$0
							BUILDING # 15	TOTALS		\$15,354	\$5,163	\$20,517

PRIVILEGED LEGAL COMMUNICATION  
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ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 15  
Building Name: Storage  
Address : C-6 Facility  
Torrance, California

Page: 2  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/28/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	X ASB	QUANTITY	QAM CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
							PROJECT TOTALS		\$15,354	\$5,163	\$20,517	

PRIVILEGED LEGAL COMMUNICATION  
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Project Number: 0390513  
 Building Number: 18  
 Building Name: Training  
 Address : C-6 Facility  
 Torrance, California

ASBESTOS ASSESSMENT SURVEY  
 DAC C-6 Torrance Facility

Page: 1  
 Building Type:  
 Year Constructed: UNKN  
 Date Inspected: 10/24/89  
 Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	MUMS OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	X ASB	QUANTITY	OMM CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
** Area 1 First Floor, Floors												
Throughout floor-Rms 1801-1807 and halls	1	3	floor tile & mastic		OX	5500 sq.ft.	OMZ	0		\$0	\$0	\$0
										AREA # 1 TOTALS	\$0	\$0
** Area 2 First Floor, Ceilings												
Throughout floor-Rms 1801-1807 and halls	2	7	sprayed acoustical plaster		OX	5600 sq.ft.	OMD	0		\$0	\$0	\$0
										AREA # 2 TOTALS	\$0	\$0
** Area 3 Second Floor, Floors												
Throughout floor-Rms 1821-1828 and halls	1	3	floor tile & mastic		OX	5500 sq.ft.	OMZ	0		\$0	\$0	\$0
										AREA # 3 TOTALS	\$0	\$0
** Area 4 Second Floor, Ceilings												

PRIVILEGED LEGAL COMMUNICATION  
DO NOT DISTRIBUTE

ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 18  
Building Name: Training  
Address : C-6 Facility  
Torrance, California

Page: 2  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/24/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	X ASB	QUANTITY	QJM CODE	EXP POT LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS		
Throughout floor-Rms 1821-1828 and halls	3	7	sprayed acoustical plaster		0%	5600 sq.ft.	OMD	0	\$0	\$0	\$0		
							AREA #	4	TOTALS	\$0	\$0		
** Area 5 Roof													
Throughout	4	3	roofing tar peper/roofing felt		0%	5600 sq.ft.	OMZ	0	\$0	\$0	\$0		
							AREA #	5	TOTALS	\$0	\$0		
										BUILDING # 18	TOTALS	\$0	\$0
										PROJECT TOTALS	\$0	\$0	

PRIVILEGED LEGAL COMMUNICATION  
DO NOT DISTRIBUTE

ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 40  
Building Name: Chemical Storage  
Address : C-6 facility  
Torrance, California

Page: 1  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 11/02/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	X ASB	QUANTITY	Q&M CODE	EXP POT LEVEL	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS	
** Area	1	1	Roof										
Throughout	1	3	roofing tar paper/roofing felt		0%	4168 sq.ft.	OMZ	0		\$0	\$0	\$0	
							AREA #	1	TOTALS	\$0	\$0	\$0	
** Area	2	2	Roof										
On exhaust vents (4 units)	2	3	weatherproof coating on steel		30%	512 sq.ft.	OMZ	10	IV	\$1,019	\$2,033	\$3,052	
							AREA #	2	TOTALS	\$1,019	\$2,033	\$3,052	
Material is presently in good condition and non-friable. This material may render friable if ripped, sanded, sawn or pulverized.													
BUILDING # 40										TOTALS	\$1,019	\$2,033	\$3,052
PROJECT TOTALS										\$1,019	\$2,033	\$3,052	

PRIVILEGED LEGAL COMMUNICATION  
DO NOT DISTRIBUTE

ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513

Building Number: 41

Building Name: Boiler House

Address: C-6 Facility

Torrance, California

Page: 1

Building Type:

Year Constructed: UNKN

Date Inspected: 11/18/89

Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	QAM CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
** Area 1 West Portion of Building												
North converter tank	1	3	boiler/tank insulation		45%	110 sq.ft.	OMB	38	III	\$3,451	\$2,764	\$6,215
Between boilers 2 and 3	2	3	boiler/tank insulation		55%	71 sq.ft.	OMB	57	II	\$2,227	\$1,784	\$4,011
South converter tank	2	3	boiler/tank insulation		55%	110 sq.ft.	OMB	57	II	\$3,451	\$2,764	\$6,215
West wall - boiler #2	3	3	mjp on pipe covering	HPS/R	40%	4 12 in. joint	OMA	38	III	\$337	\$211	\$548
West wall - outside	3	3	mjp on pipe covering	HPS/R	40%	2 18 in. joint	OMA	38	III	\$266	\$197	\$463
Outside - Northwest corner	3	3	mjp on pipe covering	HPS/R	40%	4 18 in. joint	OMA	38	III	\$533	\$395	\$928
North side - boiler #3	3	3	mjp on pipe covering	HPS/R	40%	5 4 in. joint	OMA	38	III	\$156	\$87	\$243
Northwest boiler #1	3	3	mjp on pipe covering	HPS/R	40%	3 4 in. joint	OMA	38	III	\$94	\$52	\$146
West wall - South center	3	3	mjp on pipe covering	HPS/R	40%	3 4 in. joint	OMA	38	III	\$94	\$52	\$146
North center boiler #2	3	3	mjp on pipe covering	HPS/R	40%	3 4 in. joint	OMA	38	III	\$94	\$52	\$146
East side between boilers #1 and #2	3	3	mjp on pipe covering	HPS/R	40%	4 4 in. joint	OMA	38	III	\$125	\$69	\$194
West wall - South center	3	3	mjp on pipe covering	HPS/R	40%	23 4 in. joint	OMA	38	III	\$718	\$399	\$1,117
Northwest corner	3	3	mjp on pipe covering	HPS/R	40%	1 4 in. joint	OMA	38	III	\$31	\$17	\$48
West wall - North center	3	3	mjp on pipe covering	HPS/R	40%	1 4 in. joint	OMA	38	III	\$31	\$17	\$48
West wall - North center	3	3	mjp on pipe covering	HPS/R	40%	1 4 in. joint	OMA	38	III	\$31	\$17	\$48
West wall - boiler #2	3	3	mjp on pipe covering	HPS/R	40%	3 4 in. joint	OMA	38	III	\$94	\$52	\$146
Center - off tank	3	3	mjp on pipe covering	HPS/R	40%	3 4 in. joint	OMA	38	III	\$94	\$52	\$146
West wall - South center	3	3	mjp on pipe covering	HPS/R	40%	4 6 in. joint	OMA	38	III	\$172	\$101	\$273
Southwest corner - between tanks	3	3	mjp on pipe covering	HPS/R	40%	5 6 in. joint	OMA	38	III	\$215	\$126	\$341
West wall - South center	3	3	mjp on pipe covering	HPS/R	40%	2 8 in. joint	OMA	38	III	\$107	\$63	\$170

PRIVILEGED LEGAL COMMUNICATION  
DO NOT DISTRIBUTE

ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 41  
Building Name: Boiler House  
Address : C-6 Facility  
Torrance, California

Page: 2  
Building Type:  
Year Constructed: UMKM  
Date Inspected: 11/18/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	OMM CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
Northwest corner	3	3	mjp on pipe covering	HPS/R	40%	3 8 in. joint	OMA	38	III	\$160	\$94	\$254
West wall - boiler #2	3	3	mjp on pipe covering	HPS/R	40%	3 8 in. joint	OMA	38	III	\$160	\$94	\$254
Center to West wall	3	3	mjp on pipe covering	HPS/R	40%	2 8 in. joint	OMA	38	III	\$107	\$63	\$170
Near boiler #3	3	3	mjp on pipe covering	HPS/R	40%	2 8 in. joint	OMA	38	III	\$107	\$63	\$170
West wall - boiler #1	3	3	mjp on pipe covering	HPS/R	40%	1 8 in. joint	OMA	38	III	\$53	\$31	\$84
West wall - boiler #4	3	3	mjp on pipe covering	HPS/R	40%	4 8 in. joint	OMA	38	III	\$214	\$126	\$340
West wall - boiler #3	3	3	mjp on pipe covering	HPS/R	40%	2 8 in. joint	OMA	38	III	\$107	\$63	\$170
West wall - South center	3	3	mjp on pipe covering	HPS/R	40%	11 8 in. joint	OMA	38	III	\$588	\$346	\$934
West wall - South center	4	3	mjp on pipe covering	HMS/R	50%	7 12 in. joint	OMA	38	III	\$590	\$369	\$959
North center to tank	4	3	mjp on pipe covering	HMS/R	50%	4 4 in. joint	OMA	38	III	\$125	\$69	\$194
West wall - between tanks	4	3	mjp on pipe covering	HMS/R	50%	3 4 in. joint	OMA	38	III	\$94	\$52	\$146
South center boiler #3	4	3	mjp on pipe covering	HMS/R	50%	3 4 in. joint	OMA	38	III	\$94	\$52	\$146
Southwest boiler #4	4	3	mjp on pipe covering	HMS/R	50%	3 4 in. joint	OMA	38	III	\$94	\$52	\$146
West wall - North center	4	3	mjp on pipe covering	HMS/R	50%	3 4 in. joint	OMA	38	III	\$94	\$52	\$146
West wall - by South tank	4	3	mjp on pipe covering	HMS/R	50%	3 4 in. joint	OMA	38	III	\$94	\$52	\$146
West wall - above tanks	4	3	mjp on pipe covering	HMS/R	50%	2 4 in. joint	OMA	38	III	\$62	\$35	\$97
Southwest corner by tank	4	3	mjp on pipe covering	HMS/R	50%	36 4 in. joint	OMA	38	III	\$1,123	\$624	\$1,747
West wall - South center	4	3	mjp on pipe covering	HMS/R	50%	7 4 in. joint	OMA	38	III	\$218	\$121	\$339
Southwest corner by tank	4	3	mjp on pipe covering	HMS/R	50%	4 8 in. joint	OMA	38	III	\$214	\$126	\$340
Above boiler #4	5	3	mjp on pipe covering	HMS/R	50%	17 8 in. joint	OMA	38	III	\$909	\$534	\$1,443
Boiler #4 - both ends	5	3	boiler/tank insulation	OMB	40%	85 sq.ft.	OMB	38	III	\$2,666	\$2,136	\$4,802
Boiler #3 - both ends	6	3	boiler/tank insulation	OMB	40%	20 sq.ft.	OMB	38	III	\$627	\$503	\$1,130
Above boiler #3	6	3	boiler/tank insulation	OMB	30%	20 sq.ft.	OMB	38	III	\$627	\$503	\$1,130
West wall - boiler #2	7	3	pipe covering	HPS/R	50%	85 sq.ft.	OMB	38	III	\$2,666	\$2,136	\$4,802
West wall - ceiling	7	3	pipe covering	HPS/R	50%	52 ft. 12 in. O.D.	OMA	38	III	\$1,272	\$978	\$2,250
						66 ft. 18 in. O.D.	OMA	38	III	\$2,606	\$2,171	\$4,777

PRIVILEGED LEGAL COMMUNICATION  
DO NOT DISTRIBUTE

ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 41

Building Name: Boiler House  
Address : C-6 Facility  
Torrance, California

Page: 3  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 11/18/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	OMA CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
Outside - Northwest corner	7	3	pipe covering	HPS/R	50%	28 ft. 18 in. O.D.	OMA	38	III	\$1,105	\$921	\$2,026
West wall - outside	7	3	pipe covering	HPS/R	50%	12 ft. 18 in. O.D.	OMA	38	III	\$474	\$395	\$869
West wall - North center	7	3	pipe covering	HPS/R	50%	30 ft. 4 in. O.D.	OMA	38	III	\$297	\$186	\$483
Northwest boiler #1	7	3	pipe covering	HPS/R	50%	24 ft. 4 in. O.D.	OMA	38	III	\$238	\$149	\$387
North side - boiler #3	7	3	pipe covering	HPS/R	50%	10 ft. 4 in. O.D.	OMA	38	III	\$99	\$62	\$161
West wall - North center	7	3	pipe covering	HPS/R	50%	4 ft. 4 in. O.D.	OMA	38	III	\$40	\$25	\$65
West wall - South center	7	3	pipe covering	HPS/R	50%	59 ft. 4 in. O.D.	OMA	38	III	\$585	\$366	\$951
North center boiler #2	7	3	pipe covering	HPS/R	50%	39 ft. 4 in. O.D.	OMA	38	III	\$386	\$242	\$628
Center - off tank	7	3	pipe covering	HPS/R	50%	22 ft. 4 in. O.D.	OMA	38	III	\$218	\$136	\$354
West wall - boiler #2	7	3	pipe covering	HPS/R	50%	12 ft. 4 in. O.D.	OMA	38	III	\$119	\$74	\$193
Northwest corner	7	3	pipe covering	HPS/R	50%	80 ft. 4 in. O.D.	OMA	38	III	\$793	\$496	\$1,289
East side between boilers #1 and #2	7	3	pipe covering	HPS/R	50%	71 ft. 4 in. O.D.	OMA	38	III	\$704	\$440	\$1,144
Southwest corner - between tanks	7	3	pipe covering	HPS/R	50%	75 ft. 6 in. O.D.	OMA	38	III	\$1,081	\$676	\$1,757
West wall - ceiling	7	3	pipe covering	HPS/R	50%	75 ft. 6 in. O.D.	OMA	38	III	\$1,081	\$676	\$1,757
West wall - South center	7	3	pipe covering	HPS/R	50%	22 ft. 6 in. O.D.	OMA	38	III	\$317	\$198	\$515
Center to West wall	7	3	pipe covering	HPS/R	50%	25 ft. 8 in. O.D.	OMA	38	III	\$393	\$281	\$674
West wall - boiler #2	7	3	pipe covering	HPS/R	50%	12 ft. 8 in. O.D.	OMA	38	III	\$189	\$135	\$324
West wall - boiler #3	7	3	pipe covering	HPS/R	50%	60 ft. 8 in. O.D.	OMA	38	III	\$943	\$674	\$1,617
East side between boilers #1 and #2	7	3	pipe covering	HPS/R	50%	25 ft. 8 in. O.D.	OMA	38	III	\$393	\$281	\$674
West wall - boiler #1	7	3	pipe covering	HPS/R	50%	25 ft. 8 in. O.D.	OMA	38	III	\$393	\$281	\$674
By boiler #3	7	3	pipe covering	HPS/R	50%	32 ft. 8 in. O.D.	OMA	38	III	\$503	\$359	\$862
West wall - boiler #4	7	3	pipe covering	HPS/R	50%	60 ft. 8 in. O.D.	OMA	38	III	\$943	\$674	\$1,617

PRIVILEGED LEGAL COMMUNICATION  
DO NOT DISTRIBUTE

Project Number: 0390513  
Building Number: 41  
Building Name: Boiler House  
Address : C-6 Facility  
Torrance, California

ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Page: 4  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 11/18/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	Q&M CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
West wall - South center	7	3	pipe covering	HPS/R	50%	15 ft. 8 in. O.D.	OMA	38	III	\$236	\$168	\$404
West wall - South center	7	3	pipe covering	HPS/R	50%	20 ft. 8 in. O.D.	OMA	38	III	\$314	\$225	\$539
Northwest corner	7	3	pipe covering	HPS/R	50%	7 ft. 8 in. O.D.	OMA	38	III	\$110	\$79	\$189
West wall - South center	8	3	pipe covering	HWS/R	50%	20 ft. 12 in. O.D.	OMA	38	III	\$489	\$376	\$865
West wall - North center	8	3	pipe covering	HWS/R	50%	5 ft. 4 in. O.D.	OMA	38	III	\$50	\$31	\$81
South center boiler #3	8	3	pipe covering	HWS/R	50%	27 ft. 4 in. O.D.	OMA	38	III	\$268	\$167	\$435
North center to tank	8	3	pipe covering	HWS/R	50%	21 ft. 4 in. O.D.	OMA	38	III	\$208	\$130	\$338
Southwest boiler #4	8	3	pipe covering	HWS/R	50%	27 ft. 4 in. O.D.	OMA	38	III	\$268	\$167	\$435
West wall - between tanks	8	3	pipe covering	HWS/R	50%	18 ft. 4 in. O.D.	OMA	38	III	\$178	\$112	\$290
West wall - by south tank	8	3	pipe covering	HWS/R	50%	5 ft. 4 in. O.D.	OMA	38	III	\$50	\$31	\$81
Southwest corner by tank	8	3	pipe covering	HWS/R	50%	26 ft. 4 in. O.D.	OMA	38	III	\$258	\$161	\$419
West wall - South center	8	3	pipe covering	HWS/R	50%	39 ft. 8 in. O.D.	OMA	38	III	\$613	\$438	\$1,051
Southwest corner by tank	8	3	pipe covering	HWS/R	50%	21 ft. 8 in. O.D.	OMA	38	III	\$330	\$236	\$566
Boiler #2 - both ends	9	3	boiler/tank insulation		40%	20 sq.ft.	OMB	38	III	\$627	\$503	\$1,130
Boiler #1 - both ends	10	3	boiler/tank insulation		25%	20 sq.ft.	OMB	38	III	\$627	\$503	\$1,130
Southwest tank	11	3	boiler/tank insulation		60%	311 sq.ft.	OMB	57	II	\$9,756	\$7,815	\$17,571
							AREA #	1	TOTALS	\$53,574	\$39,533	\$93,107

Material is friable and in fair condition. A significant fiber release may occur if the material is damaged or disturbed. The material has a heavy layer of paint throughout building. There are many localized areas of damage exposing the material.

\*\* Area 2 Boiler Ends

On boiler #2	12	1	gasket		35%	10 sq.ft	OMZ	12	IV	\$11	\$6	\$17
On boiler #1	12	1	gasket		35%	10 sq.ft	OMZ	12	IV	\$11	\$6	\$17

PRIVILEGED LEGAL COMMUNICATION  
DO NOT DISTRIBUTE

Project Number: 0390513  
Building Number: 41

Building Name: Boiler House  
Address : C-6 Facility  
Torrance, California

ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Page: 5  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 11/18/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	OMH CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
On boiler #4	12	1	gasket		35%	10 sq.ft	OMZ	12	IV	\$11	\$6	\$17
On boiler #3	12	1	gasket		35%	10 sq.ft	OMZ	12	IV	\$11	\$6	\$17
Material has heavy layer of paint and is in good condition.							AREA #	2	TOTALS	\$44	\$24	\$68

\*\* Area 3 Walls and Roof

Throughout roof	13	3	weatherproof coating on steel		25%	6600 sq.ft.	OMZ	11	IV	\$13,134	\$26,202	\$39,336
Throughout walls	13	3	weatherproof coating on steel		25%	10200 sq.ft.	OMZ	11	IV	\$20,298	\$40,494	\$60,792
Presently, the material is non-friable and in fair condition. This material may render friable if it is ripped, sanded, sawn or pulverized. Material is located on both sides of walls and roof. There are isolated areas of contact damage near the ground.							AREA #	3	TOTALS	\$33,432	\$66,696	\$100,128

BUILDING # 41	TOTALS	\$87,050	\$106,253	\$193,303
PROJECT TOTALS		\$87,050	\$106,253	\$193,303

PRIVILEGED LEGAL COMMUNICATION  
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ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 60  
Building Name: Redome Test Laboratory  
Address : C-6 Facility  
Torrance, California

Page: 1  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/27/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	OMZ CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS																																							
** Area 1 Second Floor, Floors																																																			
South portion of building	1	3	floor tile & mastic		6%	950 sq.ft.	OMZ	13	IV	\$3,800	\$2,698	\$6,498																																							
North portion of building entrance	2	3	vinyl floor tile		1%	1250 sq.ft.	OMI	13	IV	\$3,750	\$3,550	\$7,300																																							
	3	3	floor tile & mastic		0%	50 sq.ft.	OMZ	0		\$0	\$0	\$0																																							
Presently materials are non-friable and in good condition. Floor substrate is wood. These materials may render friable if ripped, sanded, sawn or pulverized.																																																			
** Area 2 Second Floor, Ceiling																																																			
South portion of building	4	3	acoustical tile		0%	1000 sq.ft.	OMG	0		\$0	\$0	\$0																																							
** Area 3 Second Floor, Ceiling																																																			
Under ceiling tile	5	1	Mastic		0%	200 sq.ft.		0		\$0	\$0	\$0																																							
** Area 4 Roof																																																			
Throughout roof and deck	6	3	roofing tar paper/roofing felt		0%	3450 sq.ft.	OMZ	0		\$0	\$0	\$0																																							
<table border="0" style="width:100%"> <tr> <td style="width:100px"></td> <td style="text-align:right">AREA #</td> <td>1</td> <td>TOTALS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$7,550</td> <td>\$6,248</td> <td>\$13,798</td> </tr> <tr> <td></td> <td style="text-align:right">AREA #</td> <td>2</td> <td>TOTALS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$0</td> <td>\$0</td> <td>\$0</td> </tr> <tr> <td></td> <td style="text-align:right">AREA #</td> <td>3</td> <td>TOTALS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$0</td> <td>\$0</td> <td>\$0</td> </tr> </table>														AREA #	1	TOTALS							\$7,550	\$6,248	\$13,798		AREA #	2	TOTALS							\$0	\$0	\$0		AREA #	3	TOTALS							\$0	\$0	\$0
	AREA #	1	TOTALS							\$7,550	\$6,248	\$13,798																																							
	AREA #	2	TOTALS							\$0	\$0	\$0																																							
	AREA #	3	TOTALS							\$0	\$0	\$0																																							

PRIVILEGED LEGAL COMMUNICATION  
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ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 60  
Building Name: Redome Test Laboratory  
Address : C-6 Facility  
Torrance, California

Page: 2  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/27/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	MUMB OF SAMPs	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	Q&M CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
							AREA #	4	TOTALS	\$0	\$0	\$0
							BUILDING #	60	TOTALS	\$7,550	\$6,248	\$13,798
							PROJECT TOTALS		\$7,550	\$6,248	\$13,798	

PRIVILEGED LEGAL COMMUNICATION  
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ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 608  
Building Name: Radome Test Tower - East  
Address : C-6 Facility  
Torrance, California

Page: 1  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 10/24/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	NUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	OMH CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
** Area	1	1	Exterior Walls									
West, north, south	1	1	Transite siding		35%	1080 sq.ft.	OMI	12	IV	\$2,149	\$4,288	\$6,437
Material is presently in fair condition and non-friable. Material may render friable if flipped, sanded, sawn or pulverized.												
							AREA #	1	TOTALS	\$2,149	\$4,288	\$6,437

BUILDING # 608	TOTALS	\$2,149	\$4,288	\$6,437
PROJECT TOTALS		\$2,149	\$4,288	\$6,437

PRIVILEGED LEGAL COMMUNICATION  
DO NOT DISTRIBUTE

ASBESTOS ASSESSMENT SURVEY  
DAC C-6 Torrance Facility

Project Number: 0390513  
Building Number: 66A  
Building Name: Storage (PHB)  
Address : C-6 Facility  
Torrance, California

Page: 1  
Building Type:  
Year Constructed: UNKN  
Date Inspected: 11/02/89  
Inspector: Falk, Rowles

LOCATION	SAMPLE GROUP NUMBER	MUMB OF SAMPS	MATERIAL DESCRIPTION	PIPE ID	% ASB	QUANTITY	OMZ CODE	EXP POT	PRIORITY LEVEL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
** Area	1	3	1 floor tile & mastic		2%	450 sq.ft.	OMZ	12	IV	\$1,800	\$1,278	\$3,078
Throughout			Material is presently in good condition and non-friable. This material may render friable if ripped, sanded, sawn or pulverized.				AREA #	1	TOTALS	\$1,800	\$1,278	\$3,078
** Area	2	3	roofing tar paper/roofing felt		2%	450 sq.ft.	OMZ	10	IV	\$1,530	\$1,022	\$2,552
Throughout			Material is presently in good condition and non-friable. This material may render friable if ripped, sanded, sawn or pulverized.				AREA #	2	TOTALS	\$1,530	\$1,022	\$2,552
							BUILDING # 66A	TOTALS		\$3,330	\$2,300	\$5,630
							PROJECT TOTALS			\$3,330	\$2,300	\$5,630

**APPENDIX B**  
**LABORATORY REPORTS**



**Forensic Analytical**  
Analytical Report

San Francisco • 3777 Depot Road, Suite 409, Hayward, CA 94545 • Phone 510/887-8828 • Fax 510/887-4218  
Los Angeles • 2959 Pacific Commerce Dr., Rancho Dominguez, CA 90221 • Phone 310/763-2374 • Fax 310/763-8684

**Bulk Asbestos Analysis Summary**  
**40 CFR 763, Subpart F, Appendix A (AHERA 10/87)**

**Client:**  
**Mc Donnell Douglas Realty Company**

**Client ID: 5851**  
**Report Number: 585511**  
**Date Received: 02/05/97**  
**Date Analyzed: 02/05/97**

**4060 Lakewood Blvd., 6th Floor**  
**Long Beach, CA 90808-1700**

**P.O. Num:** **FASI Job ID: 1834**  
**Job ID: Bldg. 4.**  
**Site: Harbor Gateway Center, Torrance, CA.**

Sample Number	Date Col.	Lab Num.	Asbestos Present	(Breakdown by type)
4-01A Roof sealant tar - Northwest corner parapet wall seam.	02/05/97	59704302	1-5%	Chrysotile (1-5%)

*Matilde Antillon*

**Matilde Antillon, Laboratory Supervisor, Rancho Dominguez Laboratory**

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**Bulk Material Analysis**

Method: 40 CFR 763, Subpart F, Appendix A (AHERA 10/87)

**Client:**

Mc Donnell Douglas Realty Company

Client Number: 5851

Report Number: 585511

4060 Lakewood Blvd., 6th Floor

Date Received: 02/05/97

Long Beach, CA 90808-1700

Date Analyzed: 02/05/97

Lab Number: 59704302

Date Collected: 02/05/97

Sample Number: 4-01A

P.O. Num:

FASI Job ID: 1834

Job ID: Bldg. 4.

Site: Harbor Gateway Center, Torrance, CA.

Location: Roof sealant tar - Northwest corner parapet wall seam.

Gross Description: Black semi-fibrous tar.

**Comments:**

**Microscopic Description**

<b>TOTAL ASBESTOS PRESENT:</b>		1-5	%
Chrysotile	1-5	%	
Amosite	Non-Det.	%	
		%	
		%	
<b>TOTAL NON-ASBESTOS FIBROUS MATERIAL PRESENT:</b>		1-5	%
Cellulose	1-5	%	
Fibrous Glass	Non-Det.	%	
		%	
		%	
<b>TOTAL NON-ASBESTOS NONFIBROUS MATERIAL PRESENT:</b>		90-95	%

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